Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Texas

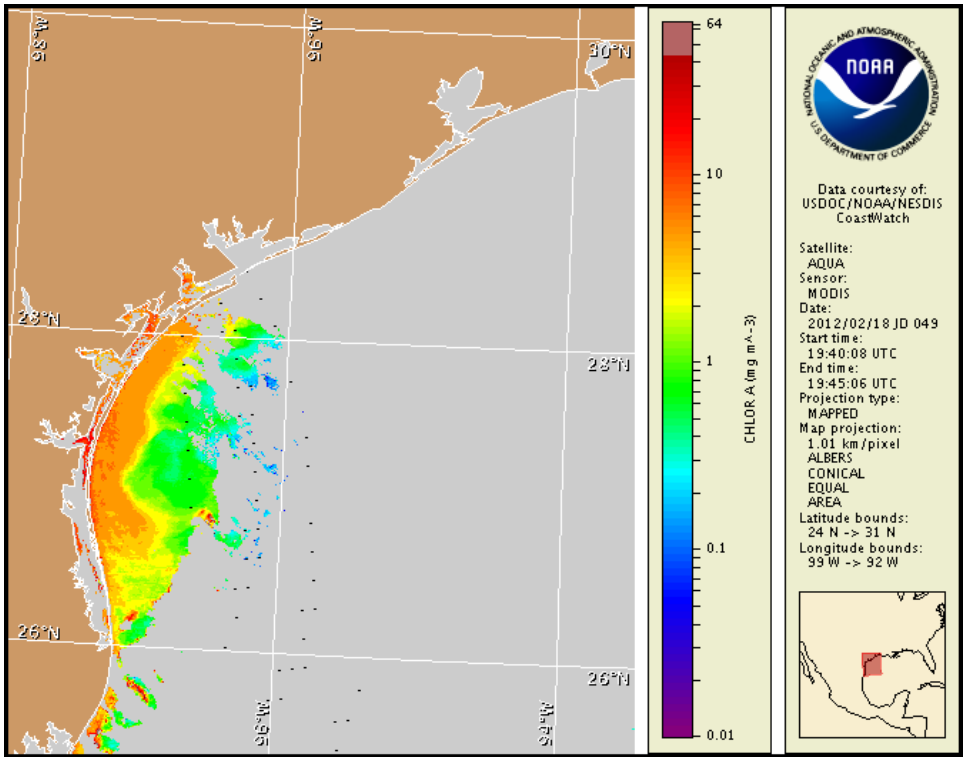
Tuesday, 21 February 2012

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, February 13, 2012



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from February 11 to 16 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit the NOAA Harmful Algal Bloom Operational Forecast System bulletin archive: http://tidesandcurrents.noaa.gov/hab/bulletins.html

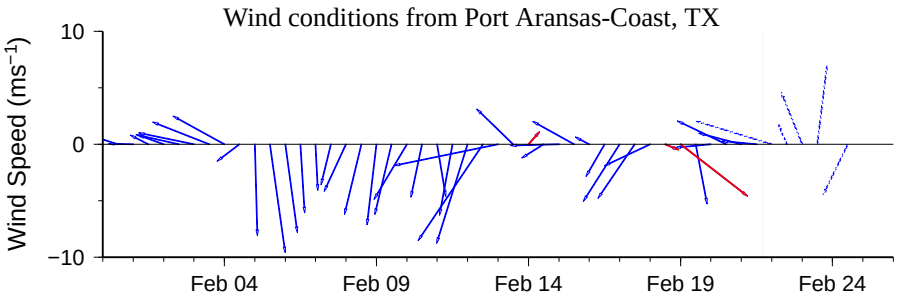
Conditions Report

There is currently no indication of a harmful algal bloom of Karenia brevis (Texas red tide) at the coast in Texas. No impacts are expected alongshore Texas today through Sunday, February 26. The harmful algae, Dinophysis, has been identified in the Freeport and Port Aransas areas. Dinophysis does not produce the respiratory irritation impacts associated with the Texas red tide caused by Karenia brevis. The Texas Department of State Health Services (DSHS) continues to monitor waters impacted by recent blooms of the harmful algae Karenia brevis (red tide) for safe shellfish harvesting. For information on area shellfish closures, contact DSHS.

Analysis

There is currently no indication of a harmful algal bloom of *Karenia brevis* at the coast in Texas. No new reports have been received for the *Dinophysis* bloom identified in the Freeport and Port Aransas areas on February 8 (TPWD). MODIS imagery (2/18; shown left) is obscured by clouds from Sabine Pass to Aransas Pass, limiting analysis in this area. Elevated chlorophyll (4 to <10 μg/L) is visible stretching along and offshore from Aransas Pass to south of the Rio Grande, with high to very high chlorophyll (10 to >20 μg/L) present stretching alongshore Padre and South Padre Islands and in patches along and offshore southern South Padre Island and south of the Rio Grande. These patches are not indicative of the presence of *K. brevis*; they are most likely artifacts of clouds in the imagery and the resuspension of benthic chlorophyll and sediments along the coast. Forecast models based on predicted near-surface currents indicate a potential maximum transport of 70km south from the Port Aransas region from February 18 to 24.

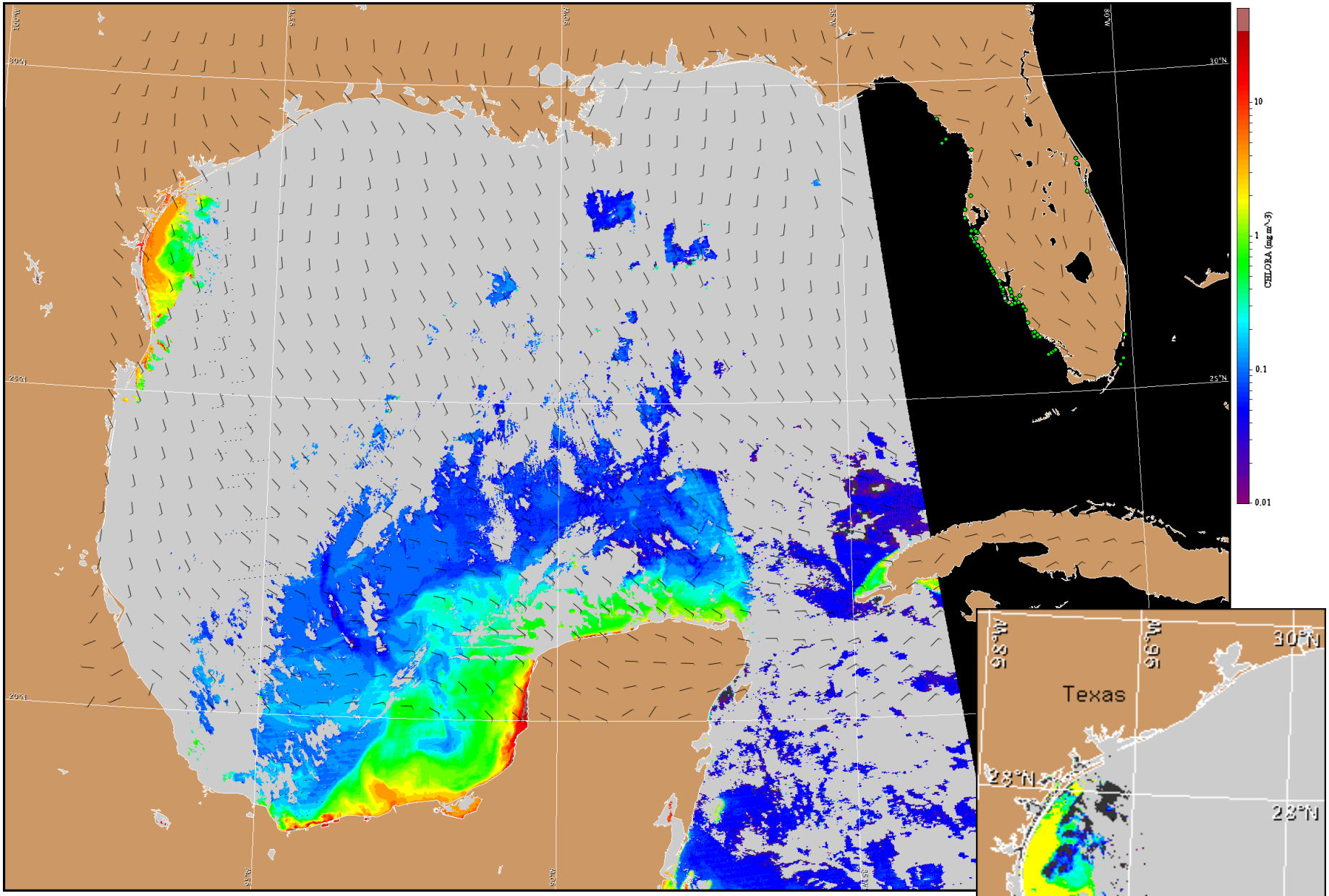
Derner, Kavanaugh



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

Wind Analysis

Port Aransas: East winds (5-15kn, 3-8m/s) today and tonight, shifting southeast (5-10kn, 3-5m/s) after midnight through Wednesday. South winds (10-15kn, 5-8m/s) Wednesday night through Thursday, shifting west after midnight. North winds (10-30kn, 5-15m/s) Friday, shifting northeast after midnight. East to southeast winds (15-20kn, 8-10m/s) Saturday.



Satellite chlorophyll image and forecast winds for February 22, 2012 12Z with cell concentration sampling data from February 11 to 16 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

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Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).